

Report

Lowell National Historical Park

■ 1.0 Site Description

The Lowell National Historical Park (NHP) is located in the downtown area of Lowell, Massachusetts. Congress authorized the Lowell NHP in 1978 based on a concept for a historical/cultural park in an urban environment, with a unique partnership between Federal, State and local governments and the private sector. The authorizing legislation stated the Park's purpose as follows:

“to preserve and interpret the nationally significant historical and cultural sites, structures, and districts in Lowell, Massachusetts for the benefit and inspiration of present and future generations by implementing to the extent practicable the recommendations in the report of the Lowell Historic Canal District Commission.”

The Park's mission statement is:

“Lowell NHP preserves and interprets the nationally significant historic and cultural sites, structures and districts in Lowell, MA, that represent the most significant planned industrial city in the United States and symbolize, in physical form, the industrial Revolution. The Park tells a story of the Industrial Revolution and the changing role of technology in a 19th and 20th century setting. The cultural heritage of many of the ethnic groups that migrated to the United States during the 19th and early 20th century, and which continues today, is still preserved in Lowell's neighborhoods. The Park provides a vehicle for economic progress in the community, encouraging creative and cooperative preservation and interpretive programs.”

The Park incorporates elements of the City's industrial history including several of the major mill complexes, the 5.6 mile canal system, and other historic buildings and features of the downtown. The Park has also worked actively with its partners in promoting the arts and culture in the City. Public artworks are important elements of the Park experience and the annual Lowell Folk Festival has become one of the premier musical events in the Northeast.

An important component of the original Park partnership was the Lowell Historic Preservation Commission (LHPC), which was created by the authorizing legislation and included representatives of City government, local citizens, State officials and Federal officials. The LHPC administered the preservation district created by the legislation and played a key role in the development of the Park's existing transportation elements.

Major features of the Lowell NHP include:

- The Park's Main Visitor Center is located in Market Mills; the former Lowell Manufacturing Company mills complex. This area serves as the Park's information Center and includes exhibits on City and its history in addition to a video program.
- The Boott Cotton Mills Museum includes a reconstructed weave room in addition to exhibits and video programs on the Industrial Revolution, labor and the history of Lowell. The Boott Mills has a separate admission charge of \$4.00 for adults and \$2.00 for children.
- The Working People Exhibit contains exhibits on the human story of Lowell including the "mill girls" who originally worked in the factories and the waves of immigrants who followed them to the City.
- The Park offers two canal boat tours during the summer months that use part of the 5.6-mile canal system developed to power the mills. The Pawtucket Canal Tours are 1.25 hours in length and are \$4.00 for adults and \$2.00 for children. A two-hour canal boat tour, "Harnessing the Merrimack, Nature of the Merrimack and Canal and River Cruises" is \$5.00 for adults and \$3.00 for children. Admission to the Boott Mills is incorporated into the canal boat tours. Lowell's 1.5 mile trolley system is used to serve the canal boat tours and is available as transportation between the Boott Mills and the main Visitor Center at Market Mills.

Annual visitation was 274,000 when first reported in 1980. Visitation climbed to a high of 802,000 in 1986 and remained between 700,000 and 800,000 until 1993 when it declined to just over 600,000. In 1994 visitation declined further to 469,000 but has since increased to 563,000. The higher visitation in the 1980's was probably due in part to a novelty effect, but was also helped by a significant advertising budget that has not been available in recent years.

The University of Idaho conducted the most recent visitor survey in August 1997. The survey provided the following information on Park visitors:

- The average age of visitors surveyed was 49 and the average group size was 3.7. Seventeen per cent (17 percent) of respondents were over the age of 65 and 19 percent were under the age of 15. The sample was 57 percent female and 67 percent of adult respondents reported having at least a bachelor's degree.
- When asked if they had visited the Park in the previous twelve months, 78 percent answered that they had not. Seventy two per cent (72 percent) had not visited in the previous five years.
- About six percent of visitors were international, with most coming from Canada or England. Of domestic visitors, 41 percent were from Massachusetts, followed by New Hampshire (nine percent), California (five percent), New York (five percent) and Connecticut (five percent).

- Planned length of stay was generally less than one day, with 35 percent reporting that they planned to spend two hours or less and another 40 percent reporting that they planned to spend 2 to 4 hours in the Park. Actual visits reported were longer, with 25 percent reporting that they spent less than two hours in the Park and 44 percent reporting they spent 2 to 4 hours. Twenty five per cent (25 percent) reported that they planned to spend 5 hours or more in the Park but 31 percent actually did.
- The most common activities were visiting the Visitor Center (86 percent), viewing exhibits (66 percent), visiting the Boott Cotton Mills Museum (65 percent) and learning about the Industrial Revolution (55 percent).
- Just under half the respondents (48 percent) indicated that the Lowell NHP was their primary destination while 33 percent reported that it was one of several destinations and 19 percent reported that their trip was unplanned. One-third of the respondents visited Boston as part of their trip.
- Over 90 percent of visitors reported that they had no difficulty finding the Park or finding their way around when they reached downtown Lowell.
- Among visitor facilities used, 58 percent reported using the trolley system and 45 percent reported that they took a canal tour. Self-guided walking tours were reported by 35 percent and 10 percent took a ranger-led walking tour. Both elements received high quality ratings, with 94 percent rating the canal tour as good or very good and 87 percent rating the trolley as good or very good.

The next area of major development in Lowell is along the Merrimack River waterfront. Construction of the Tsongas Arena and the LeLacheur Baseball Park has already placed additional demands on the transportation system in the waterfront area. A Riverwalk connecting the Boott Mills with the Baseball Park and the expanding University of Massachusetts at Lowell campus has been completed and will be opened soon to the public. It is anticipated that commercial development will take place along the Riverwalk corridor but parking and access issues need to be addressed in a number of locations.

■ 2.0 Existing ATS

The canal boats and trolley system form the two Alternative Transportation Systems (ATS) elements of the Lowell NHP. The Park owns four canal boats that seat approximately 30 persons and are used only for tours. The Park owns three historic trolleys; two are open-air vehicles and one is closed for use in cold or rainy weather.

Canal Boats

Park use of the canals for tours is provided through a public-private partnership. The Massachusetts Department of Environmental Management (DEM) owns canal locks. The DEM also owns a 20-foot right-of-way along the canals, which is being used to develop a

series of trails throughout the Park area, as well as recreational air rights and most of the historic gatehouse structures. Boott Hydropower is a local utility that owns the waterflow rights, in addition to the canal bottoms and walls. Canals are available for recreational tours as a result of partnership that is defined in Boott's Federal Energy Regulatory Commission license.

Trolley System

The trolley system currently forms a 'T' with the eastern leg traveling past the Boott Mill to the Eastern Canal Park and the lower locks of the Pawtucket Canal. The western leg goes to the Suffolk Mills. The common leg to the south goes by Lowell High School and currently terminates near the Visitor Center. The trolley runs on a posted schedule and also serves as a link in the canal boat tours. The trolleys, which were built according to plans of early Lowell streetcars, were placed into service in 1984 under a cooperative agreement with the Boston & Maine Railroad. In 1988 extensions to the Suffolk Mills and the Eastern Canal Park were completed.

The most recent trolley ridership data provided were for 1995, when a total of 69,000 riders were reported. Of this total 24,000 rode as part of a tour and 45,000 rode independently. This represented an increase over the 1994 total of 62,000 riders. However, during the mid-1980s total annual ridership regularly exceeded 100,000 with the majority of riders using the system as part of tours.

In June 1999 the NPS signed a cooperative agreement with the New England Electric Railway Historical Society and three local agencies (Lowell Regional Transit Authority [LRTA], Northern Middlesex Council of Governments, and the City of Lowell) to evaluate trolley system extensions. The Electric Historical Society agreed to supply cars from its collection on a rotating basis for display in Lowell. Periodic use of the cars on the trolley system will be permitted. All parties agreed to participate in upcoming studies of trolley system expansion.

Other Public Transportation Services

The LRTA operates local bus service in the City of Lowell and surrounding communities. The main transfer point for the system is located in downtown Lowell. The LRTA also operates a parking garage for the MBTA commuter rail station (Gallagher Terminal) in Lowell. There are currently 750 parking spaces available at the site but an additional 400 are being added due to increasing demand. The Lowell station is the end of a major commuter line that provides service to North Station in Boston. Travel time to North Station is 45 to 50 minutes and the one-way fare is \$3.50. While the distance between the Gallagher Terminal and the NHP Visitor Center is short, there is no feasible walking route and no connecting transit service that is convenient for visitors. Extension of the trolley system to the Gallagher Terminal is seen as a potential method of promoting greater use of the commuter rail system by Boston-based Park visitors.

■ 3.0 ATS Needs

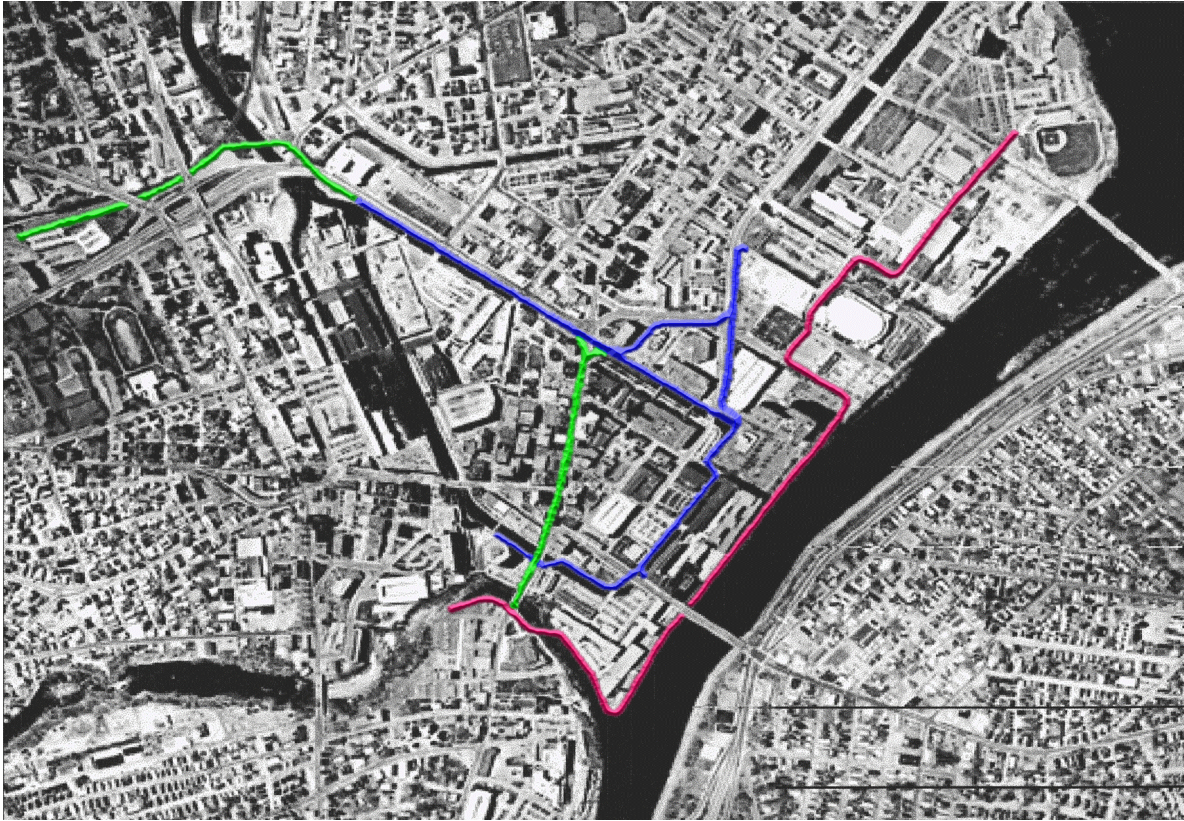
The current focus of the Lowell NHP is on the expansion of the trolley system. Since its inception there have been a variety of proposed additions to the system. Some of the potential additions currently under discussion are:

- Extension of the system to service the Gallagher Terminal. While this is a relatively short addition, it requires a crossing of either Fletcher or Dutton Street, which together form one of the major entrances to the downtown area. The route would also have to go either under or around a major rotary.
- Extension of service to the west toward the Lawrence Mills and the LeLacheur baseball park. Original proposals focussed on extending the existing line beyond its current terminus at the Suffolk Mills but a more recent proposal identified an opportunity for a riverfront trolley line. This line would run eastward from Middlesex Community College and the Lowell Memorial Auditorium, parallel the Riverwalk to Tsongas Arena, where it would then go run south around the Arena toward Lawrence Mills and the ballpark. An alternate connection could be made between Wannalancit Mills and the ballpark. While this would provide a catalyst to the desired development along the riverfront it also presents significant engineering and environmental challenges.
- A proposal has been made to restore trolley service along Merrimack Street between the Memorial Auditorium and the current terminus on Dutton Street. This route would enable the trolley system to serve as a true downtown circulation system and attract more visitors to the businesses along Merrimack Street. Traffic and parking impacts would be significant however and would have to be carefully studied. A map of the proposed trolley extensions is shown in Figure 1.

The proposed expansion of the trolley system presents a number of significant challenges. The system now almost exclusively serves tourists. The Gallagher Terminal and Merrimack Street extensions would expand the market to local residents and make the trolley an integral part of Lowell's transit network. This is also true of proposed extensions to Tsongas Arena and the ballpark. A feasibility study is required to look at the potential markets for these new services and evaluate institutional arrangements that might better serve the expanded system. Transfer of control to the LRTA has been discussed, but the financial implications of such a transfer need to be carefully examined. If determined to be feasible from a market and institutional standpoint, the Riverfront line would need significant resources in the areas of engineering and environmental evaluation to determine whether the project can be implemented for a realistic cost.

The system is currently maintained in the former coal bin of the Boott Mill. There is no room for expansion so if the vehicle fleet is increased additional resources will be needed for maintenance.

When connections to the Gallagher Terminal are improved, marketing efforts designed to encourage use of the commuter rail system would be more effective. Since one-third of Park visitors are also visiting Boston, more aggressive marketing at tourist sites in Boston could help increase visitation to the Park. At the present time, parking and signing appear to be adequate and were not cited as problems in the recent visitor survey.

Figure 1. Map of Proposed Trolley Extensions

■ 4.0 Basis of ATS Needs

There are several identified needs behind proposed expansion of the Lowell trolley system. Before these proposals proceed, it is important that the stakeholders review these needs, develop clear definition of goals and objectives and then measure the effectiveness of various proposed alternatives in meeting them. Some of the identified needs are:

- An improved connection between the Gallagher Terminal, the Park facilities and the downtown that reinforces the experience of the Park and also serves regular commuters.
- Improved connections between Park sites and the downtown businesses along Merrimack Street that will help to attract more visitors to the area.
- Improved circulation for both visitors and local residents between the downtown, sports venues and developing recreational and commercial attractions along the riverfront. Visitors could be encouraged to leave their cars downtown and use the transit system to travel throughout the City.
- An expanded trolley system could encourage longer visits, with positive economic impacts for the City.

■ 5.0 Bibliography

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■ 6.0 Persons Interviewed

Patrick C. McCrary, Superintendent, Lowell NHP

Peter Aucella, Assistant Superintendent, Lowell NHP

Edward F. (Ted) Davis, Facilities Manager, Lowell NHP

Christina Briggs, Planner, Lowell NHP

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